

CC homologous recombination) were identified in exons 4, 7, 8 and 9. Such
 CC inactivation allows the breeding of 'knock-out' animals, e.g. pigs
 CC suitable as donors of organs to overcome hyperacute rejection problems in
 CC human xenotransplantation. (Updated on 25-MAR-2003 to correct PR field.)
 XX
 SQ Sequence 371 AA;

Query Match 99.2%; Score 1998; DB 2; Length 371;
 Best Local Similarity 99.2%; Pred. No. 1.6e-195;
 Matches 368; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MNVKG RVVLSMLLVSTVMVVFWEYINSPEGS LFWIYQSKNPEVGSSAQRGWFP SWFNNG 60
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 MNVKG RVVLSMLLVSTVMVVFWEYINSPEGS LFWIYQSKNPEVGSSAQRGWFP SWFNNG 60
 Qy 61 THSYHEEEDAIGNEKEQRKEDNRGELPLVDWFNPEKRPEVVTITRWKAPVVWEGTYNRAV 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 61 THSYHEEEDAIGNEKEQRKEDNRGELPLVDWFNPEKRPEVVTITRWKAPVVWEGTYNRAV 120
 Qy 121 LDNY YAKQKITVGLTVFAVGRIE HYLEEF LISANTYFMVGHKVIFYIMVDDISRMPLIE 180
 ||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 121 LDNY YAKQKITVGLTVFAVGRIE HYLEEF LISANTYFMVGHKVIFYIMVDDISRMPLIE 180
 Qy 181 LGPLRSFKVFEIKSEKRWQDISMMRMTIGEHILAHIQHEVDLFCMDVDQVFQNNFGVE 240
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 181 LGPLRSFKVFEIKSEKRWQDISMMRMTIGEHILAHIQHEVDLFCMDVDQVFQNNFGVE 240
 Qy 241 TLGQSV AQ LQAWWYKAHPDEFTYERRKESAAYIPFGQ GDFYHAAIFGGTPTQVLNITQE 300
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 241 TLGQSV AQ LQAWWYKAHPDEFTYERRKESAAYIPFGQ GDFYHAAIFGGTPTQVLNITQE 300
 Qy 301 CFKGILQDKENDIEAEWHDESHLNKYFLNKP TKILSPEYCW DYHIGMSVDIRIVKIAWQ 360
 ||||||||||||||||||| : |||||||||||||||||||
 Db 301 CFKGILQDKENDIEAEWHDESHLNKYFLNKP TKILSPEYCW DYHIGMSVDIRIVKIAWQ 360
 Qy 361 KKEYNLVRNNI 371
 |||||||||||
 Db 361 KKEYNLVRNNI 371

RESULT 10

AAR62508

ID AAR62508 standard; protein; 359 AA.

XX

AC AAR62508;

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DT 25-MAR-2003 (revised)

DT 26-JUN-1995 (first entry)

XX

DE Galactosyl transferase clone product.

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KW Gal-alpha (1,3) galactosyl transferase; xenograft; transplant; rejection.

XX

OS Sus scrofa domestica.

XX

PN WO9421799-A1.

XX

PD 29-SEP-1994.

XX

PF 15-MAR-1994; 94WO-AU000126.

XX

PR 16-MAR-1993; 93AU-00007854.

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PA (AUST-) AUSTIN RES INST.

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PI Sandrin MS, McKenzie IFC;

XX

DR WPI; 1994-317019/39.

DR N-PSDB; AAQ74712.

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PT DNA sequences encoding Gal-alpha (1,3)galactosyl transferase - and clones
 PT contg. such sequences are used in xenograft therapies.

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PS Disclosure; Page 35; 50pp; English.

XX

CC The sequence is that of the product of the porcine Gal-alpha (1,3)

CC galactosyl transferase gene which produces a Gal epitope on the surface
 CC of porcine cells. This epitope is recognised by antibodies which are
 CC responsible for hyperacute rejection of xenotransplanted pig cells,
 CC tissues and organs. See also AAR62507. (Updated on 25-MAR-2003 to correct
 CC PN field.)
 XX
 SQ Sequence 359 AA;

Query Match 95.5%; Score 1925; DB 2; Length 359;
 Best Local Similarity 96.2%; Pred. No. 4.8e-188;
 Matches 357; Conservative 2; Mismatches 0; Indels 12; Gaps 1;

Qy 1 MNVKG RVVLSMLLVSTVMVVFWEYINSPEGS LFWIQSKNPEVGSSAQRGWFFPSWFNNG 60
 ||||||||||||||||||||| : |||||||||||||||||||||
 Db 1 MNVKG RVVLSMLLVSTVMVVFWEYIN-----RNPEVGSSAQRGWFFPSWFNNG 48

Qy 61 THSYHEEEDAIGNEKEQRKEDNRGELPLVDWFNPEKRPEVVTITRWKAPVVWEGTYNRAV 120
 |||||||||||||||||||||||||||||||||||||||||||||
 Db 49 THSYHEEEDAIGNEKEQRKEDNRGELPLVDWFNPEKRPEVVTITRWKAPVVWEGTYNRAV 108

Qy 121 LDNY YAKQKITVGLTVFAVGRIE HYLEEFLISANTYFMVGHKVIFYIMVDDISRMPLIE 180
 |||||||||||||||||||||||||||||||||||||||||||||
 Db 109 LDNY YAKQKITVGLTVFAVGRIE HYLEEFLISANTYFMVGHKVIFYIMVDDISRMPLIE 168

Qy 181 LGPLRSFKVFEIKSEKRWQDISMMRMTIGEHILAHIQHEVDFLFCMDVDQVFQNNFGVE 240
 |||||||||||||||||||||||||||||||||||||||||:|||||||
 Db 169 LGPLRSFKVFEIKSEKRWQDISMMRMTIGEHILAHIQHEVDFLFCIDVDQVFQNNFGVE 228

Qy 241 TLGQSVAQLQAWWYKAHPDEFTYERRKESAAYIPFGQGDFYHAAIFGGTPTQVLNITQE 300
 |||||||||||||||||||||||||||||||||||||||||||||
 Db 229 TLGQSVAQLQAWWYKAHPDEFTYERRKESAAYIPFGQGDFYHAAIFGGTPTQVLNITQE 288

Qy 301 CFKGILQDKENDIEAEWHDESHLNKYFLLNKPTKILSPEYCWYDHIGMSVDIRIVKIAWQ 360
 |||||||||||||||||||||||||||||||||||||||||||||
 Db 289 CFKGILQDKENDIEAEWHDESHLNKYFLLNKPTKILSPEYCWYDHIGMSVDIRIVKIAWQ 348

Qy 361 KKEYNLVRNNI 371
 |||||||||
 Db 349 KKEYNLVRNNI 359

RESULT 11

AAR90573

ID AAR90573 standard; protein; 359 AA.

XX

AC AAR90573;

XX

DT 08-APR-1996 (first entry)

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DE Pig alpha(1,3)-galactosyltransferase.

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KW Alpha(1,3)galactosyltransferase; xenograft hyperacute rejection;
 KW transplantation; galactose alpha(1,3) galactose.

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OS Sus scrofa.

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PN W09534202-A1.

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PD 21-DEC-1995.

XX

PF 14-JUN-1995; 95WO-US007554.

XX

PR 15-JUN-1994; 94US-00260201.

PR 21-JUL-1994; 94US-00278282.

XX

PA (ALEX-) ALEXION PHARM INC.

PA (AUST-) AUSTIN RES INST.

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PI Sandrin MS, Fodor WL, Rother RP, Squinto SP, Mckenzie IFC;

XX

DR WPI; 1996-049326/05.

DR N-PSDB; AAT12242.

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PT Redn. of rejection of xenogeneic cells following transplantation - by
 PT introducing a vector expressing fucosyl:transferase into the cells.

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